NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACT SHEET

(pursuant to NAC 445A.236)

Permittee Name: Red Rock Country Club

3054 Red Springs Drive Las Vegas, NV 89135

Facility: Red Rock Country Club Golf Courses

Arroyo Course

Mountain Course
 3054 Red Springs Drive

Las Vegas, NV 89135

Permit Number: NEV2002517

Location: West Area of Las Vegas, Clark County, Nevada

Latitude: 36° 07' 32.7" N Longitude: 115° 20' 33.4" W

Township 21 South, Range 59 East, Section 14

Flow: 2.3 MGD (30-Day Average)

3.1 MGD (Daily Maximum)

<u>Wellhead Protection</u>: The Red Rocks Country Club golf courses, the Arroyo and the Mountain Courses, are not within an established Wellhead Protection Zone. The courses are not within a 6000' Drinking Water Protection Area (DWPA) around any public water supply well.

General: The Red Rocks Country Club operates two 18-hole golf courses, the Arroyo and the Mountain Courses, with the facility offices located at 3054 Red Springs Drive, Las Vegas, Clark County, Nevada. This facility covers approximately 309 acres, of which 301 acres are fairways (turf) and 8 acres are greens. The facility uses combined treated effluent and potable water for spray and drip irrigation. The Arroyo Course utilizes four (4) water features, and the Mountain Course utilizes three (3) water features. All water features incorporate ultra-violet ozonation and/or chlorination water treatment systems to maintain lake clarity and water quality. Treated effluent is to meet Category A reuse bacteriological standards, pursuant to Nevada Administrative Code (NAC) 445A.2762

The Red Rock Country Club receives tertiary treated, nitrified, disinfected effluent from the Desert Breeze Water Resource Center (DBWRC) wastewater treatment facility (WWTF) for irrigation of turf, greens and landscaped areas. The DBWRC is regulated under NDEP Permit NEV2001509. The DBWRC recycled water is blended with potable water to provide the course with the volume of water required. The relative percentages of potable and recycled water will vary with the seasonal irrigation demand.

Red Rocks Country Club FACT SHEET NEV2002517 Page 2 of 4

<u>Flow</u>: The previous permitted 30-day average flow is 1.92 MGD, which is the maximum anticipated amount for the hot summer months for the original 18-hole golf course. With the construction of an adjacent 18-hole course, the permitted effluent reuse has been increased to a 30-day average flow of 2.3 MGD, and a daily maximum of 3.1 MGD.

Receiving Water Characteristics: Groundwater is estimated by be greater than 500 below ground surface, based on Las Vegas Valley Water District well logs. Groundwater is of potable quality. Groundwater flow direction is reported to be east-southeast. There are no monitoring wells required at this facility due to the depth to groundwater.

<u>Proposed Effluent Monitoring Requirements</u>: The discharge from the facility shall be monitored and limited by the following:

TABLE I. Discharge Limitations

<u>PARAMETERS</u>	EFFLUENT DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	30 Day Ave.	Daily Max.	Measurement Frequency	Sample Type
Flow (MGD)	2.3	3.1	Continuous	Flow meter
Total Coliform (CFU or MPN/100 ml) ⁽²⁾	2.2	23	Weekly	Discrete
Total Nitrogen as N ⁽¹⁾ (mg/l)	Monitor and Report		Monthly	Calculate
Total Kjeldahl Nitrogen as N (mg/l)	Monitor and Report		Monthly	Composite
Total Oxidized Nitrogen as N (Nitrate + Nitrite) (pounds)	Monitor and Report		Monthly	Composite
Ammonia as N (mg/l)	Monitor and Report		Monthly	Composite
Total Nitrogen Applied (pounds/acre/year)	220		Annually ⁽³⁾	Calculate

- (1) Total Nitrogen as N can be reported as the sum of Total Oxidized Nitrogen and Total Kjeldahl Nitrogen
- (2) CFU = Colony Forming Unit, MPN = Most Probable Number
- (3) Report in 4th quarter DMR.

Samples taken in compliance with the monitoring requirements specified in Table I. are to be collected prior to effluent reuse. The quality of the product used by the Permittee may be reported as calculated values based on the blend of treated effluent and potable water. Monitoring requirements may be satisfied by data collected by the DHWRC and the Las Vegas

Red Rocks Country Club FACT SHEET NEV2002517 Page 3 of 4

Valley Water District. Copies of the backup data or water quality calculation summaries are to be maintained at the reuse site for inspection by the Division upon request. Discharge Monitoring Reports are to be submitted by the Permittee to the Division at the following address.

Department of Conservation and Natural Resources Division of Environmental Protection Bureau of Water Pollution Control 901 S. Stewart Street, Suite 4001 Carson City, Nevada 89701

Schedule of Compliance

The Permittee shall implement and comply with the provisions of the schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications, which the Administrator may make in approving the schedule of compliance

- a. The Permittee shall achieve compliance with the effluent limitations upon issuance of the permit.
- b. **By MMM DD, 2008**, the Permittee shall submit, for review and approval, an Operations and Maintenance (O&M) Manual, stamped by a professional engineer registered in the State of Nevada. The O&M Manual must be compiled in accordance with the guidance document *WTS-2* "*Minimum Information Required for an Operation and Maintenance Manual*". The draft documents shall be submitted for review and approval to:

Mr. Nadir Sous Division of Environmental Protection Bureau of Water Pollution Control - Las Vegas 2030 E. Flamingo Rd Suite 230 Las Vegas, NV 89119-0837

- c. **By MMM DD, 2008**, The Permittee shall submit, for review and approval, an Effluent Management Plan (EMP), stamped by a professional engineer registered in the State of Nevada. The EMP must be compiled in accordance with guidance document *WTS-1b*, "General design criteria for preparing an effluent management plan". The draft documents shall be submitted for review and approval to the above address.
- d. The Permittee shall submit an annual report each year of the cross connection control documentation, as required by Part I.B.13 of this permit, with the 4th Quarter DMR report. The report shall document the cross-connection control inspections, including the annual shut down tests for the permitted site, which shall be conducted by an AWWA Certified Cross-Connection Control Specialist, in conjunction with the LVVWD Back Flow Prevention and Cross-Connection Control Staff.
- e. All compliance deliverables shall also be submitted to both the following:

Red Rocks Country Club FACT SHEET NEV2002517 Page 4 of 4

> Division of Environmental Protection Bureau of Water Pollution Control ATTN: Compliance Coordinator 901 S. Stewart Street, Suite 4001 Carson City, NV 89701

Procedures for Public Comment:

The Notice of the Division's intent to issue a permit authorizing the facility to discharge to the groundwater of the State of Nevada subject to the conditions contained within the permit, is being sent to the **Las Vegas Review-Journal** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator. **All comments must be received by NDEP by 5:00 pm, June 2, 2008.**

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted. Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determined to be appropriate. All public hearings must be conducted to accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Proposed Determination

The Division has made the tentative determination to reissue the permit for a period of five (5) years, subject to effluent and monitoring limitations.

Rationale for Permit Requirements

The limitations and monitoring requirements are intended to provide for appropriate reuse of treated effluent, to minimize the possibility of adverse impact to groundwaters of the State, and to alert those persons who might have contact with treated effluent to its presence at the facility.

Prepared by: Janine Hartley

March 2008